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## Amendments to the Claims:

Please cancel Claim 14.

The Claim Listing below will replace all prior versions of the claims in the application:

## Claim Listing:

- (Previously Presented) A process comprising the step of reacting a macrocyclic compound characterized by at least two nucleophilic moieties with a bifunctional bridging component characterized by its ability to form π-allyl metal complex in the presence of catalyst thereby achieving a bridged macrocyclic product.
- 2. (Original) The process of claim 1, wherein the macrocyclic compound is a macrolide antibiotic.
- 3. (Original) The process of claim 1, wherein the macrocyclic compound is an erythromycin derivative.
- 4. (Original) The process of claim 3, wherein the erythromycin derivative is azithromycin, desmethyl azithromycin, roxithromycin, clarithromycin, telithromycin, or cethromycin.
- 5. (Original) The process of claim 1, wherein the macrocyclic compound is selected from:

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wherein

D is selected from  $-NHCH_2$ -,  $-NHCHR_1$ -,  $-NHCR_3R_4$ -,  $-NR_1CH_2$ -, -NHC(O)-,  $-NR_1C(O)$ -, -NHC(S)-, or  $-NR_1C(S)$ -;

Each R<sub>1</sub> is independently selected from hydrogen, deuterium, a substituted or unsubstituted, saturated or unsubstituted aliphatic group, a substituted or unsubstituted, saturated or unsaturated alicyclic group, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, saturated or unsaturated heterocyclic group;

R<sub>3</sub> and R<sub>4</sub> is independently selected from the group consisting of hydrogen, acyl, a substituted or unsubstituted, saturated or unsaturated aliphatic group, a substituted or unsubstituted, saturated or unsubstituted group, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, saturated or unsubstituted heteroaromatic group, saturated or unsaturated heterocyclic group; or can be taken together with the nitrogen atom to which they are attached to form a substituted or unsubstituted heterocyclic or heteroaromatic ring;

L is selected from hydrogen, a substituted or unsubstituted, saturated or unsaturated aliphatic group, a substituted or unsubstituted, saturated or unsaturated

alicyclic group, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, or a substituted or unsubstituted heterocyclic group; one of U or V is hydrogen and the other is independently selected from the group

$$\begin{cases} -O_{i_1} & G \\ & R_1 & \text{or oth} \end{cases}$$

consisting of:  $R_1$ ,  $OR_1$ ,  $OC(O)R_1$ ,  $OC(O)NR_3R_4$ ,  $S(O)_nR_1$ , carbohydrate or sugar moiety;

or U and V, taken together with the carbon atom to which they are attached, are C=O;

or UV and  $R_oR_f$ , taken together with the carbon atoms to which they are attached, are  $-C(R_1)=CH$ -;

one of J or G is hydrogen and the other is selected from: R<sub>1</sub>, OR<sub>1</sub>, or NR<sub>3</sub>R<sub>4</sub>; or J and G, taken together with the carbon atom to which they are attached, are selected from: C=O, C=NR<sub>1</sub>, C=NOR<sub>1</sub>, C=NO(CH<sub>2</sub>)<sub>m</sub>R<sub>1</sub>, C=NNHR<sub>1</sub>, C=NNHCOR<sub>1</sub>, C=NNHCOR<sub>3</sub>, C=NNHCONR<sub>3</sub>R<sub>4</sub>, C=NNHS(O)<sub>n</sub>R<sub>1</sub>, or C=N-N=CHR<sub>1</sub>;

 $R_a$ ,  $R_b$ ,  $R_c$ , and  $R_d$  are independently selected from  $-R_1$ ,  $-OR_1$ ,  $-S(O)_nR_1$ ,  $-C(O)OR_1$ ,  $-OC(O)OR_1$ ,  $-OC(O)OR_1$ ,  $-C(O)NH-R_1$ ,  $-NHC(O)-R_1$ ,  $-N(R_3)(R_4)$ ,  $-NHC(O)-OR_1$ ,  $-NHC(O)NH-R_1$ , or  $-OC(O)NH-R_1$ ;

or R<sub>a</sub> and R<sub>b</sub>, R<sub>a</sub> and R<sub>c</sub>, R<sub>a</sub> and R<sub>d</sub>, R<sub>b</sub> and R<sub>c</sub>, R<sub>b</sub> and R<sub>d</sub>, or R<sub>c</sub> and R<sub>d</sub>, taken together with the carbon atom or atoms to which they are attached, are selected from substituted or unsubstituted alicyclic or substituted or unsubstituted heterocyclic;

one of  $R_e$  and  $R_f$  is selected from hydrogen or methyl, and the other is independently selected from halogen, deuterium, or  $R_1$ ;

R<sub>h</sub> is hydroxy;

R<sub>g</sub> is selected from hydrogen, a substituted or unsubstituted, saturated or unsaturated aliphatic group, a substituted or unsubstituted, saturated or unsaturated alicyclic group, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heterocyclic group;

or  $R_g$  and  $R_h$ , taken together with the carbon atom to which they are attached, are selected from an epoxide, a carbonyl, a substituted or unsubstituted olefin, a substituted or unsubstituted alicyclic, a substituted or unsubstituted heterocyclic;

W is NR<sub>3</sub>R<sub>4</sub>;

one of X and Y is hydrogen, substituted or unsubstituted aliphatic, and the other is independently selected from: hydroxy, -SH, -NH<sub>2</sub>, or -NR<sub>1</sub>H;

or X and Y, taken together with the carbon atom to which they are attached, are selected from: C=O, C=NR<sub>1</sub>, C=NOR<sub>1</sub>, C=NO(CH<sub>2</sub>)<sub>m</sub>R<sub>1</sub>, C=NNHR<sub>1</sub>, C=NNHCOR<sub>1</sub>, C=NNHCONR<sub>3</sub>R<sub>4</sub>, C=NNHS(O)<sub>m</sub>R<sub>1</sub>, or C=N-N=CHR<sub>1</sub>:

R<sub>p</sub> is selected from hydrogen, acyl, silane, or a hydroxy protecting group; X<sub>H</sub> is selected from hydrogen or halogen; m is an integer; and n is 0, 1, or 2.

- 6. (Previously Presented) The process of claim 5, wherein, for the macrocylic compound, L is ethyl.
- (Previously Presented) The process of claim 5, wherein, for the macrocylic compound, one of X and Y is hydrogen and the other is selected from hydroxy or amino.
- (Previously Presented) The process of claim 5, wherein, for the macrocylic compound, X and Y, taken together with the carbon atom to which they are attached, are selected from the group consisting of: C=O, C=NH, C=N-OH, or C=N-NH<sub>2</sub>.
- (Previously Presented) The process of claim 5, wherein, for the macrocylic compound, Rg is methyl.
- 10. (Previously Presented) The process of claim 5, wherein, for the macrocylic compound, Re is hydrogen and Rf is selected from methyl, allyl, or propargyl.

- 11. (Previously Presented) The process of claim 5, wherein, for the macrocyclic compound, one of U and V is hydrogen and the other is selected from -OH or -O-cladinose.
- 12. (Previously Presented) The process of claim 5, wherein, for the macrocylic compound, U and V, taken together with the carbon atom to which they are attached, are C=O.
- 13. (Cancelled)
- 14. (Cancelled)
- 15. (Previously Presented) A process comprising the step of reacting a macrocyclic compound characterized by at least two nucleophilic moieties with a bifunctional bridging component characterized by at least two leaving groups in the presence of catalyst thereby achieving a bridged macrocyclic product.